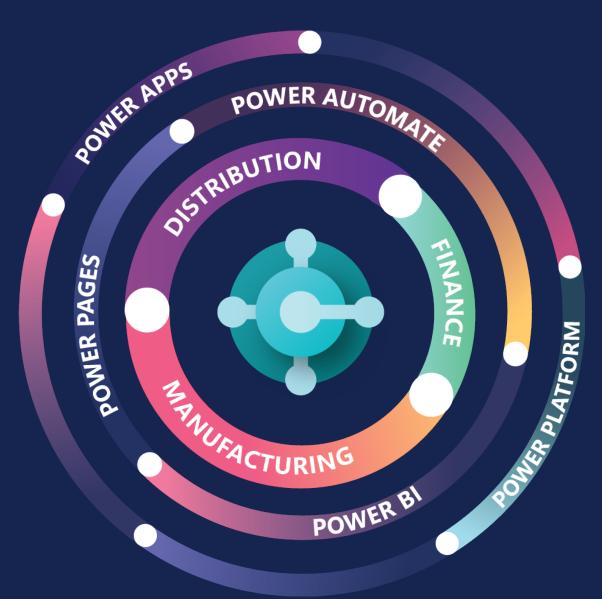


BUSINESS CENTRAL CONNECT

Demystifying Planning



Agenda

- Overview of Planning
- Planning scenarios & how to configure
- Deep Dive subjects
- Manufacturing Planning





Planning Overview

- The planning system aims to balance Supply & Demand
- It plans by Item, Variant and Location against time
- Planning Tools available to us:
 - Requisition Worksheet
 - Planning Worksheet
 - Order Planning
 - Order Promising





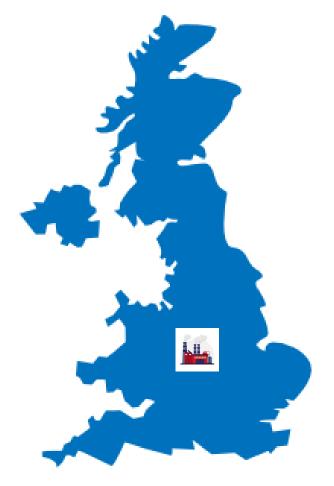
Demand v Supply

Demand		Supply
Negative Inventory		Inventory
Purchase Returns		Sales Return Orders
Sales Order		Inbound Transfers
Service Order	Prio	Production Orders
Production Component	iority	Assembly Order
Assembly Order		Purchase Order
Outbound Transfer		
Blanket Sales Order		7
Forecast (unconsumed)		



Planning Scenarios

Welcome to Contoso (formerly trading as Cronus UK Ltd.)









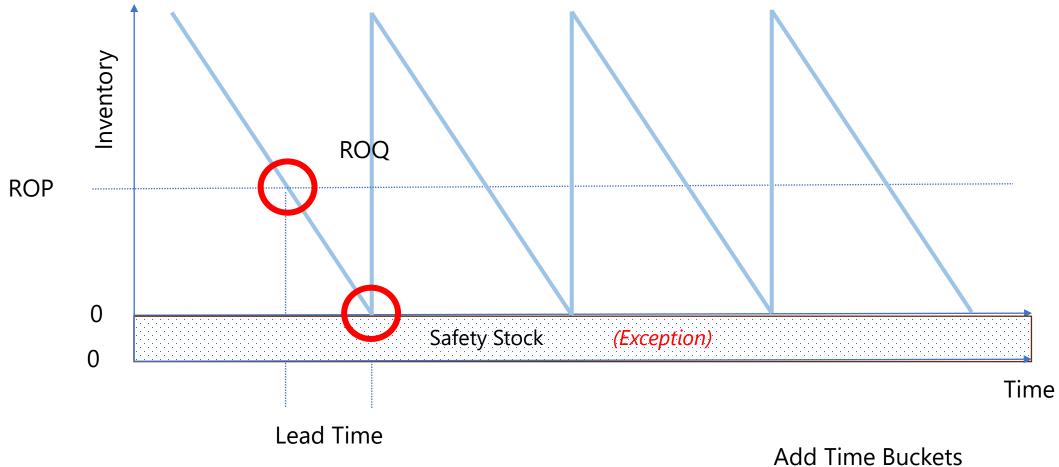


M8 Nut

- We use them often
- They don't cost much
- They are used on many machines
- When we get down to the last 2500, we want to purchase 10,000
- They come in boxes of 5,000 (may contain nuts)







Plan Forwards

Fixed-Reorder Qty.

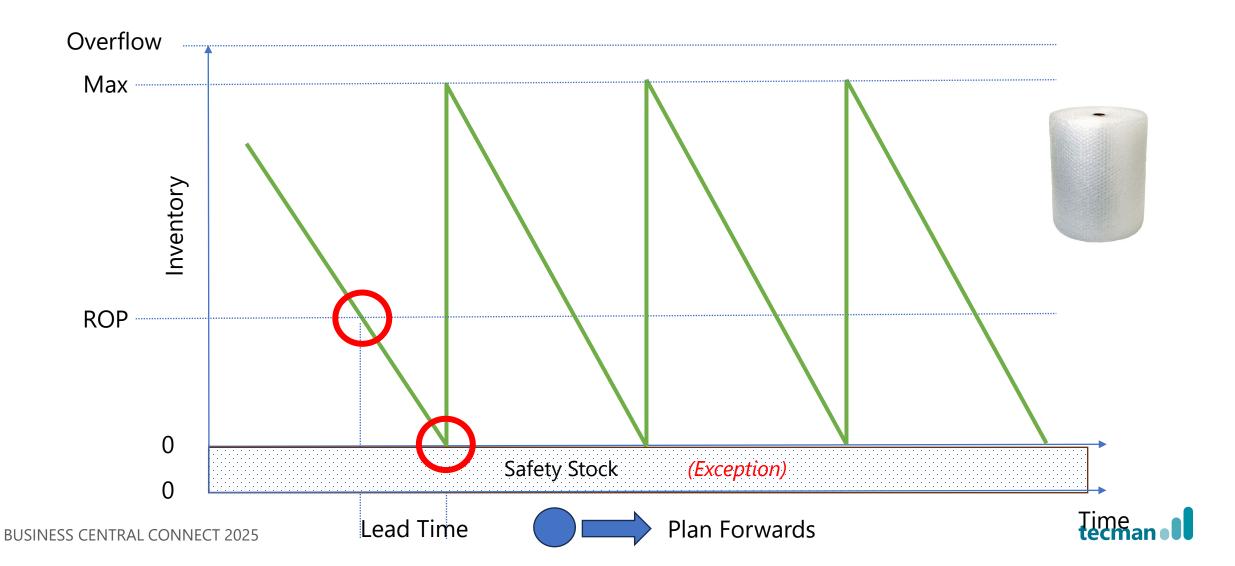


Bubble Wrap

- We buy in rolls
- It takes up a lot of space we can only fit up to 10 rolls in the warehouse.
- When we get down to the last 4, we want to buy some more but not too much!
- We only bought some last week but the warehouse team wrapped themselves up and had a fight and we're below the reorder point again.





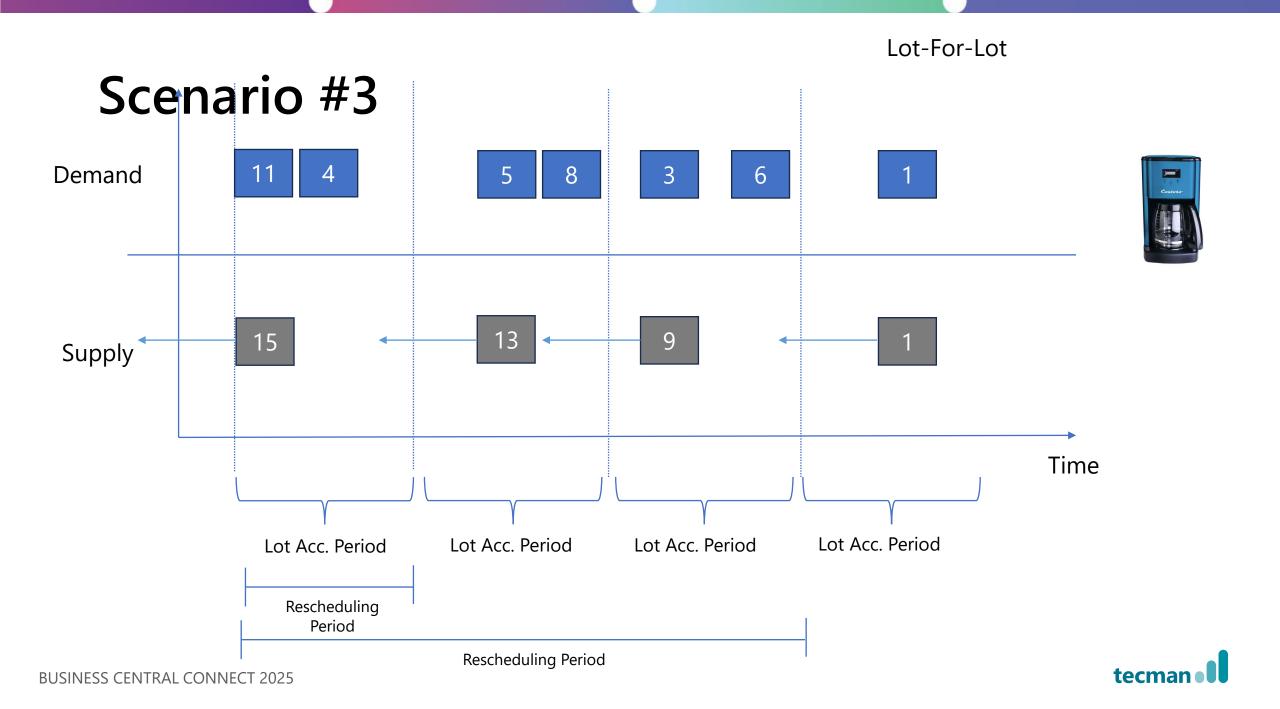


Autodrip Coffee Machine

- We sell a lot of them
- We also forecast how many we think we may sell
- As good as the weatherman







Autodrip Lite Coffee Machine

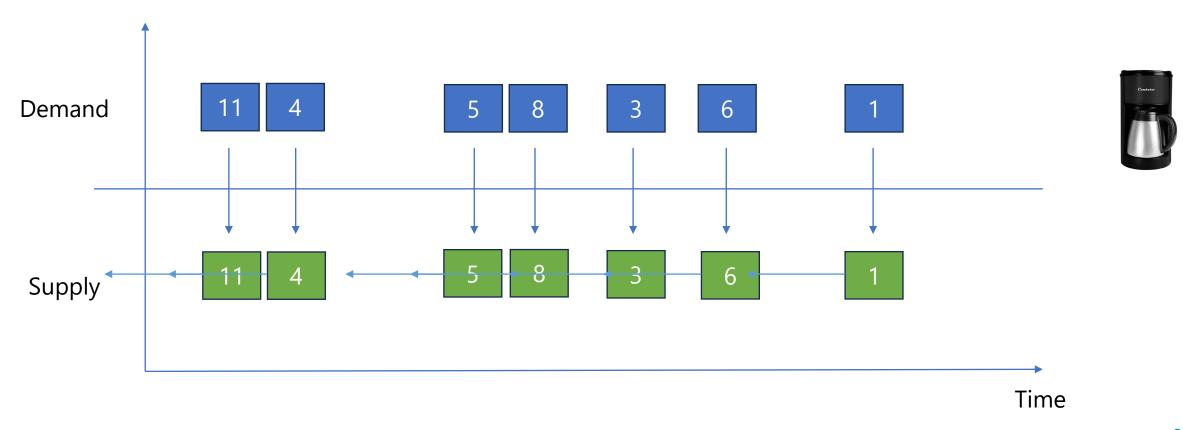
- We don't sell many
- We only want to commit to making these when we get an order
- You buy it, we'll make it



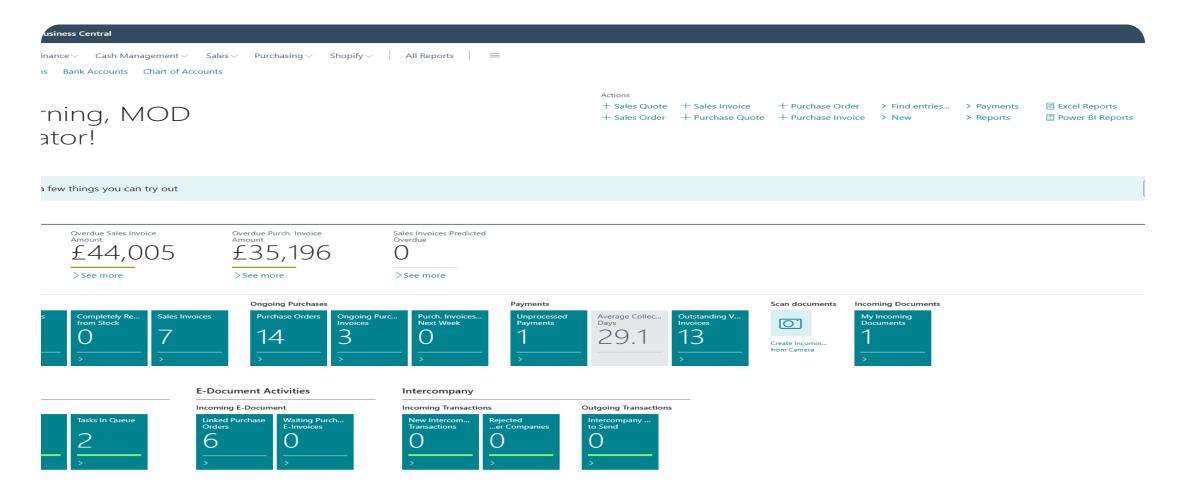


Order

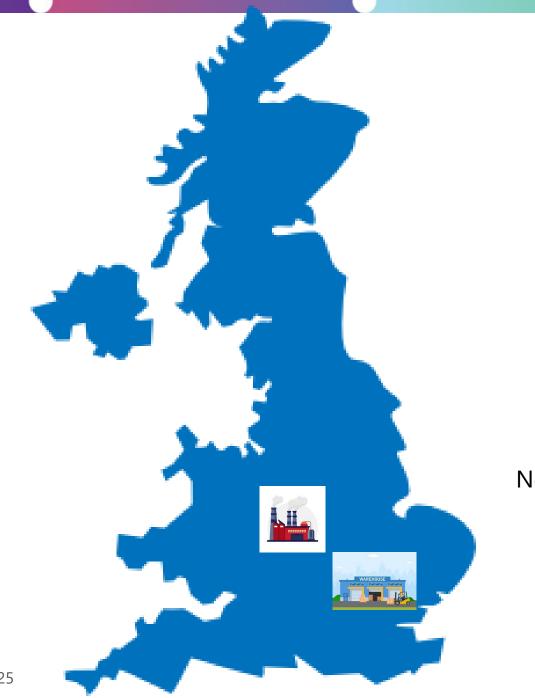
Scenario #4



Demo





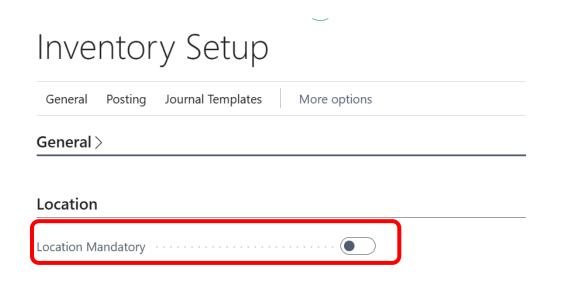


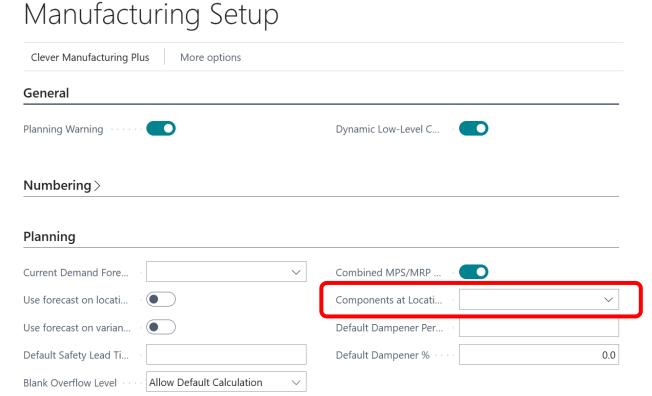


New Warehouse in Milton Keynes



Planning with Locations

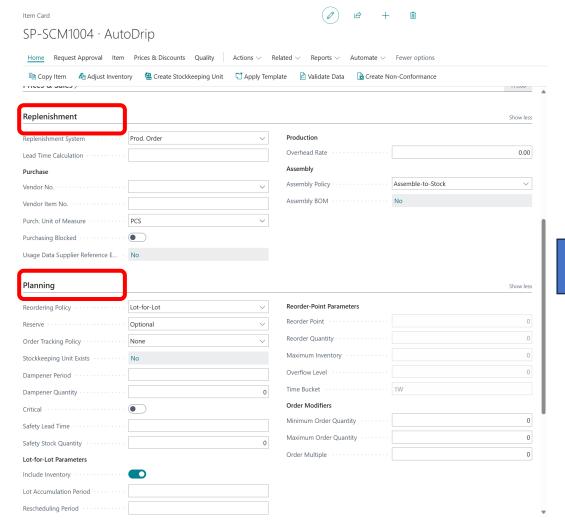


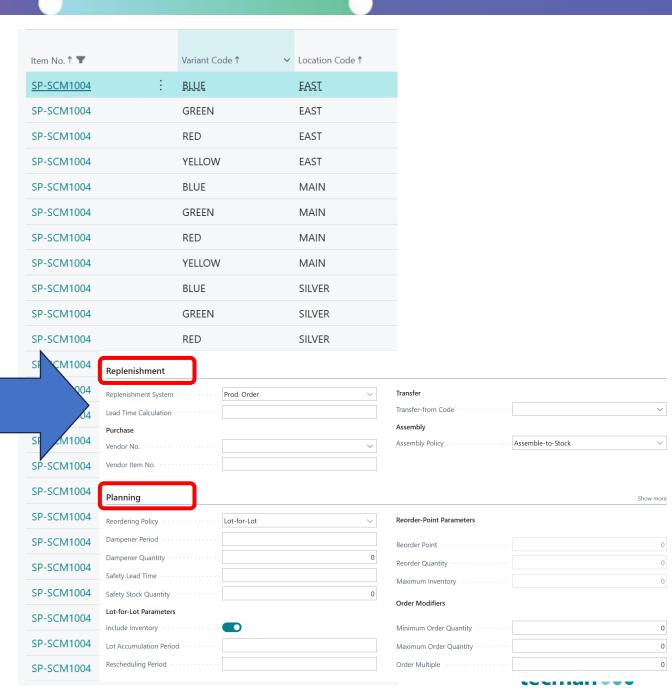




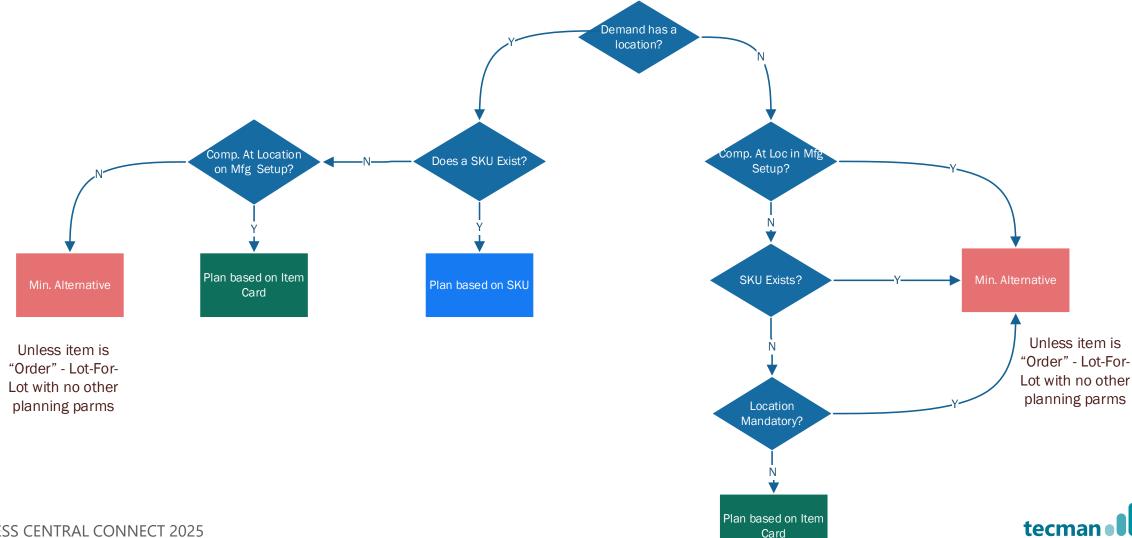
Planning with Locations

Stockkeeping Units





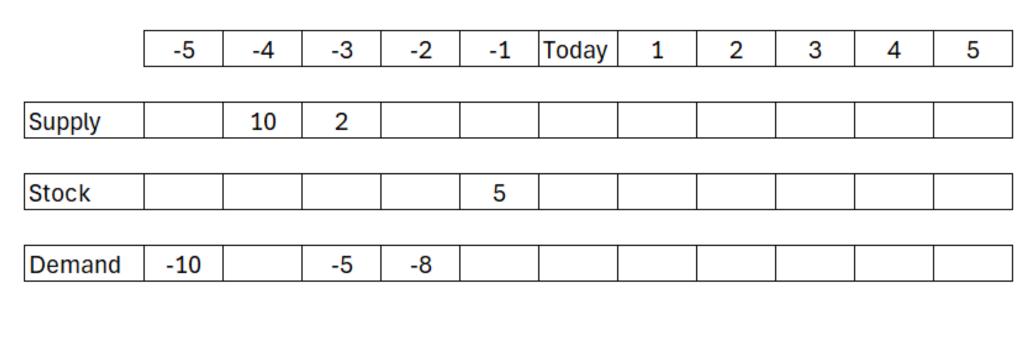
Planning with Locations



Deep Dive

Planning Start Date

START



Availability		-6			
, traitain tity		_			

Respect Planning Parameters fo...



RESPECT planning
Parameters>Min Order qty. 10 Em

Emergency: Order 10

elow zero on the planning start date)



Fine Tuning Planning

- Too many action messages will cause confusion
- Customers may purchase/make too little or too much & affect customer service or cashflow ☺
- How can we take away the (some) noise?
 - Time Buckets (Fixed / Maximum Qty.)
 - Rescheduling Periods (Lot-for-Lot)
 - Lot Accumulation Period (Lot-for-Lot)
 - Dampeners (Qty & Period)....
- Sometimes you just have to get through the list!



Manufacturing Setup - Default for All Items

Planning

Current Demand Fore	~	Combined MPS/MRP	
Use forecast on locati		Components at Locat	<u> </u>
Use forecast on varia		Default Dampener Pe	
Default Safety Lead T	1D	Default Dampener %	0.0
Blank Overflow Level	Allow Default Calculation		



Item Card

Planning

Reordering Policy	Lot-for-Lot \vee
Reserve	Optional
Order Tracking Policy	None
Stockkeeping Unit Exists	No
Dampener Period · · · · · · · · · · · · · · · · · · ·	
Dampener Quantity	0



- Dampener Quantity
 - If we have a bit too much supply, it won't suggest doing anything if the excess is within the Dampener Qty.
 - If we are short it will suggest.
- Dampener Period
 - If supply is now too early, it won't suggest changing dates if within the Dampener Period.
 - If it's late it will suggest.



	Fixed Reorder Qty.	Maximum Order Qty.	Lot-For-Lot	Order
Dampener Quantity				
Dampener Period				



Order Modifiers

Once the planning system has calculated new supply, if there are modifiers set, it will adjust the the quantities to meet:

- Minimum Quantity
- Maximum Quantity
 create multiple supply orders (good for production batches / scheduling)
- Order multiple rounds up to the multiple (e.g. buy in boxes of 100).



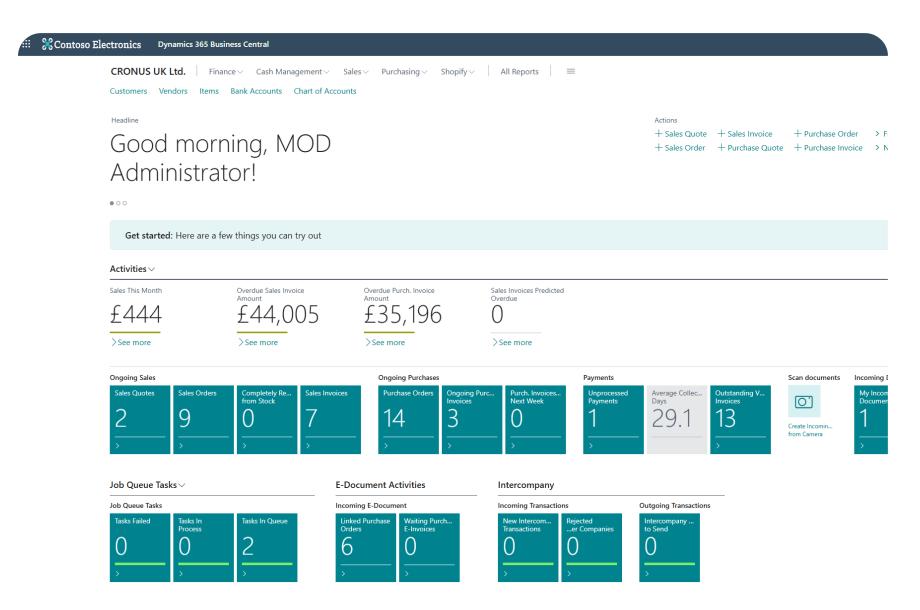
Order Tracking/Action Messaging

- Order tracking is the link between supply & demand
- Action Messages are the resultant message to balance the supply & demand (e.g. New Purchase Order)
- This can be done dynamically without the need to run planning





Demo





Action Messages Only – Beware!

Entry Sequence	Sales Order	Sales Order Action Messa		Plann	ing				
1	① Note The order tracking system of order network. This implies the system of the system of the system of the system of the system.	hat the system does not	prioritise orders that ma	ay					
3	be more urgent in terms of their due date. It is therefore up to the logic of the planning system or the wisdom of the planner to rearrange these priorities in a meaningful way.								



Order Tracking

Are you sure?

You can consider setting the **Order Tracking Policy** to None if you won't require tracking on the fly a demand against a supply or vice versa. The tracking of supply against demand is handled by the order tracking functionality or the planning engine.



We don't recommend that you use order tracking together with planning functionality.

① Note

Tracking functionality does not replace planning functionality, which considers all items, demands, and supplies together to provide the optimal planning proposals to optimize customer service levels and balance inventory levels.



Reservations & Item Tracking

- A reservation creates a hard link between supply & demand, so can change the way
 planning calculates (e.g. sequence of orders). You are overriding the priorities.
- Item Tracking (Lot / Serial) can also have the same effect.



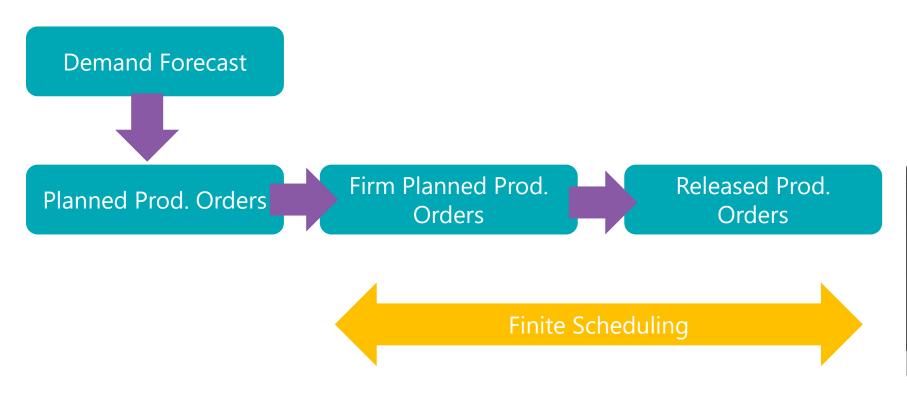
Planning Flexibility

- Field on the Requisition / Planning Worksheet
- Passed to the Prod. Order / Purchase Line / Transfer / Assembly Header
- Setting to "None" Prevents the planning system from moving that supply
- Warning! This may cause Over Supply

Warning		No.	Sch VAPS	Action Message	Acc Acti Mes	Original Due Date	Planning Flexibility	Order Date	Due Date
Emergency		101-053		New			Unlimited	27/11/2024	28/11/2024
Attention		101-053		Resched. & Chg. Qty.		05/12/2024	Unlimited	04/12/2024	04/12/2024
Attention		101-053		New			None	08/01/2025	09/01/2025
Attention		101-053		New			None	31/01/2025	01/02/2025
<u>Emergency</u>	:	GZ10071		New			None ~	27/11/2024	28/11/2024
Attention		GZ10071		New			Unlimited	08/01/2025	08/01/2025
Attention		C710071		Now			Halimitad	21 /01 /2025	21 /01 /2025

Manufacturing

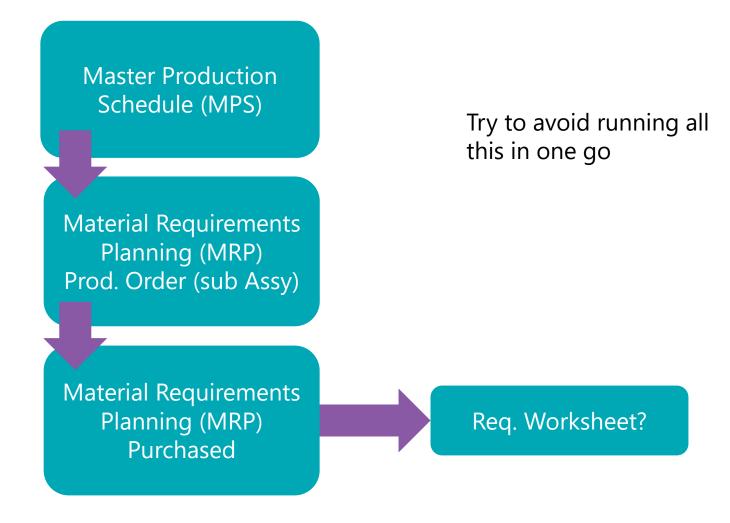






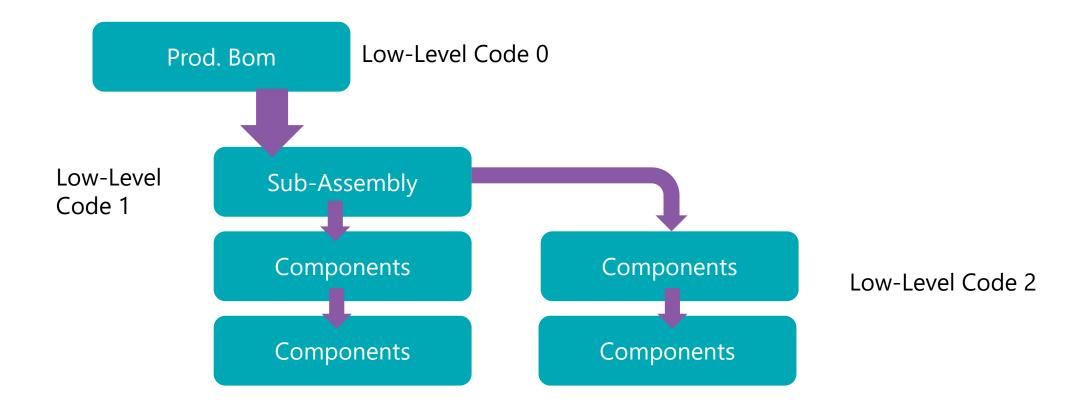


Planning Sequence



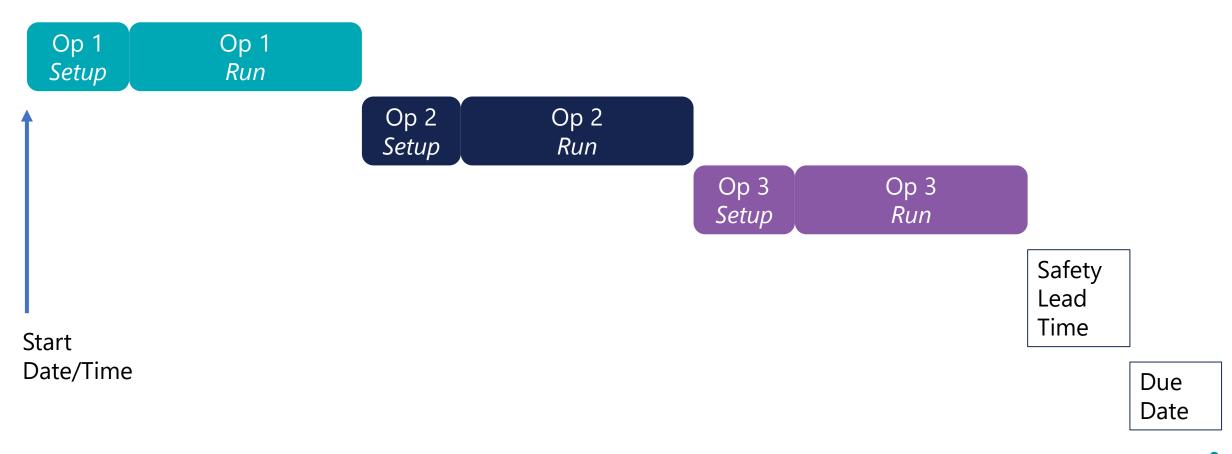


Low level Code – what is it?



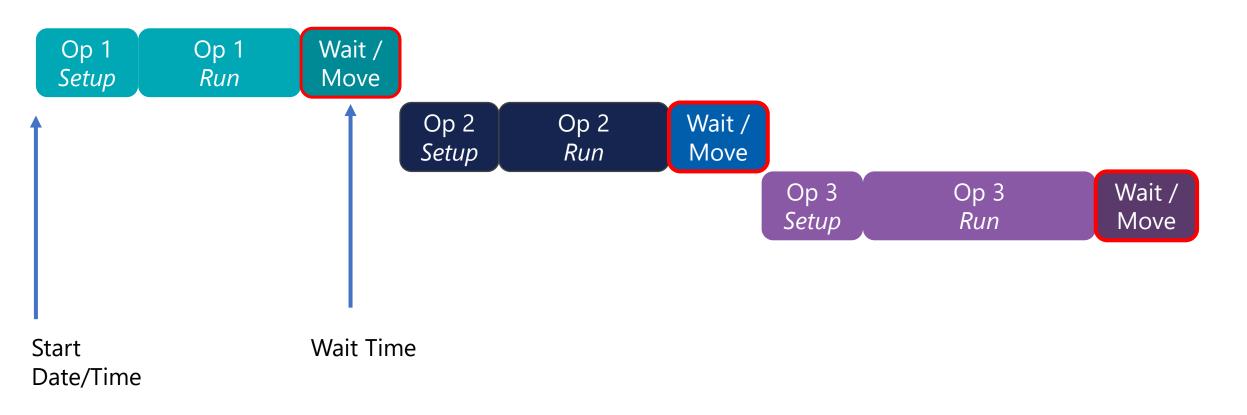


Routings



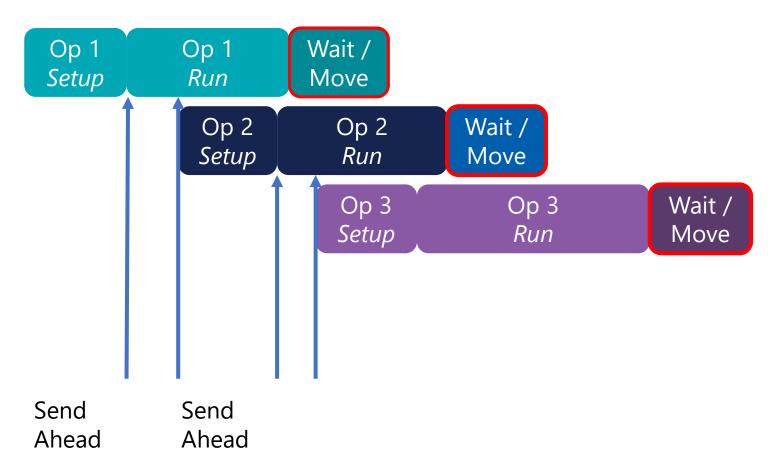


Routings – Wait / Move Time





Routings – Send Ahead Quantity





Wrap up

- 4 x Reordering Policies and their use
- Multiple Locations and Stockkeeping Units
- Deep Dive into planning details
- Order Tracking & Action Messaging
- Manufacturing



Call to Action

- Read the Microsoft "Design Details" section of MS Learn on Supply Planning
- When implementing, choose the appropriate Reorder Policy for the item
- Use Dampeners / Time buckets etc to reduce the noise
- Sit with the planner and work through the action messages
 the question will always be "Why is it suggesting this?"

- > Company hub
- > Local functionality
- > Set up Business Central
- → Design details

Application design details overview

- > Design details: Supply planning
- > Design details: Inventory costing
- > Design details: Warehouse management
- > Design details: Item tracking
- > Design details: General journal post line
 - Design details: Non-deductible VAT
- > Design details: Dimension set entries



Thank you

